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DOCKET NO. D-2006-023 CP-3

DELAWARE RIVER BASIN COMMISSION

Discharge to a Tributary of Special Protection Waters

**Coolbaugh Township
Wastewater Treatment Plant Renewal
Coolbaugh Township, Monroe County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an Application submitted to the Delaware River Basin Commission (DRBC or Commission) by BCM Engineers on behalf of Coolbaugh Township, on September 16, 2012 (Application), for renewal of a wastewater treatment plant (WWTP) approval. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0062294 for the discharge was issued by the PADEP on October 1, 2009.

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the Delaware River Basin Compact. The Monroe County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on March 5, 2013.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew and modify the approval of the docket holder's existing Coolbaugh Township WWTP. The WWTP is designed for a hydraulic capacity of 0.1 million gallons per day (mgd), however, the PADEP has limited its permitted discharge rate to 0.052 mgd. This docket modifies the previous DRBC approval (Docket No. D-2006-023 CP-2) to limit the WWTP to a discharge rate of 0.052 mgd. Additionally, the docket holder did not submit an application for renewal of the DRBC approval prior to the docket expiration date of September 26, 2012.

2. Location. The Coolbaugh Township WWTP is located off of Pocono Blvd (PA Route 611) approximately 0.375 miles east of the intersection with PA Route 423, in Coolbaugh Township, Monroe County, Pennsylvania. The WWTP is located upstream from F.E. Walter Reservoir and Pocono Lake, and will continue to discharge to the Tobyhanna Creek, a tributary

to the Lehigh River, at River Mile 183.66 – 83.5 – 22.3 (Delaware River - Lehigh River - Tobyhanna Creek) in the drainage area to the Lower Delaware Special Protection Waters (SPW) area.

The WWTP outfall is located in the Tobyhanna Creek Watershed as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001	41 ° 10' 20"	75 ° 25' 03"

3. **Area Served.** The existing WWTP will continue to serve Coolbaugh Township, Monroe County, Pennsylvania.

For the purpose of defining the Area Served, sections B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. **Physical Features.**

a. **Design Criteria.** The docket holder's existing WWTP treats domestic sanitary wastewater through an activated sludge and membrane bioreactor treatment process. The WWTP is designed for a hydraulic capacity of 0.1 mgd, however, the PADEP has limited its permitted discharge rate to 0.052 mgd. This docket limits the WWTP to a discharge rate of 0.052 mgd. See FINDINGS section of this docket. No modifications are proposed to the WWTP.

b. **Facilities.** The existing WWTP facilities consist of an influent grinder, a comminutor, a 15,000 gallon equalization tank, Zenon membrane bioreactor process, an ultraviolet light disinfection system, 135,000 gallon offline storage tank (surges) and an aerobic sludge digester/holding tank.

Prior facilities and processes for the WWTP have been described in DRBC Docket No. D-2006-023 CP-2, approved by DRBC on September 26, 2007.

The docket holder's wastewater treatment facility discharges to waters classified as SPW and is required to have available emergency power. The Coolbaugh Township WWTP has a generator available for emergency power supply and a new 480 volt power transformer from PPL will be installed. (SPW)

The docket holder's wastewater treatment facility is not staffed 24 hours per day, and is required to provide a remote alarm system that continuously monitors plant operations. The docket holder is providing an auto-dialer and integrated control monitoring system for the WWTP. (SPW)

The docket holder's existing wastewater treatment facility has prepared and implemented an emergency management plan (EMP) in accordance with Commission requirements. (SPW)

The docket holder's existing wastewater treatment facility does not discharge to Outstanding Basin Waters (OBW), and is not required to have a nonvisible discharge plume. (SPW)

The docket holder's existing wastewater treatment facility has prepared and implemented an emergency management plan suitable to Commission standards. (SPW)

The docket holder is currently working with the Country Place Golf Course to pursue partial spray of wastewater during the summer months. (SPW)

The project facilities are located outside the 100-year flood plain.

Wasted sludge will continue to be hauled off-site by a licensed hauler for disposal at a (State approved) facility.

c. Water Withdrawals. The potable water supply in the project service area is provided by Pennsylvania American Water Company – Pocono District via DRBC Docket No. D-1998-016 CP-3, approved on July 13, 2011.

d. NPDES Permit / DRBC Docket. The PADEP issued NPDES Permit No. PA0062294 on October 1, 2009, which includes final effluent limitations for the project discharge of 0.052 mgd to surface waters classified by the PADEP as HQ-CWF (High Quality – Cold Water Fishery). The following average monthly effluent limits are among those listed in the NPDES permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES permit.

OUTFALL 001 (Discharge to Tobyhanna Creek)		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times	As required in the NPDES permit
Total Suspended Solids	30 mg/l	As required in the NPDES permit
Dissolved Oxygen	5 mg/l	As required in the NPDES permit
CBOD (5-Day at 20° C)	25 mg/l (85% minimum removal*)	As required in the NPDES permit
Ammonia Nitrogen (5-1 to 10-31)	3.0 mg/l	As required in the NPDES permit
(11-1 to 4-30)	9.0 mg/l	
Fecal Coliform (5-1 to 9-30)	200 / 100 ml as a geo. avg.	As required in the NPDES permit
(10-1 to 4-30)	2,000 / 100 ml as a geo. avg.	
Phosphorus	1.0 mg/l	As required in the NPDES permit

* DRBC Requirement

EFFLUENT TABLE A-2: DRBC Parameter Not Included in NPDES permit.

OUTFALL 001 (Discharge to Tobyhanna Creek)		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids *	1,000 mg/l *	One per quarter*
Nitrate-Nitrogen	Monitor & Report	Monthly
Total Nitrogen	Monitor & Report	Monthly

* See Condition II.s. In the Decision Section

f. **Relationship to the Comprehensive Plan.** The project was previously included in the Comprehensive Plan by Docket No. D-2006-023 CP-1 on July 19, 2006. The project facility was upgraded from a 0.052 mgd to 0.1 mgd WWTP by Docket No. D-2006-023 CP-2 on September 26, 2007. The project is located in the drainage area of the DRBC Special Protection Waters of the Lower Delaware River.

B. FINDINGS

The purpose of this docket is to renew and modify the approval of the docket holder's existing Coolbaugh Township WWTP. No modifications to the WWTP are proposed.

The previous DRBC docket (D-2006-023 CP-2, issued on September 26, 2007) approved: 1) the upgrade of the existing WWTP (which consisted of converting the previous sequencing batch reactor treatment system to an activated sludge process and adding the membrane bioreactor); and 2) the expansion of the WWTP from 0.052 mgd to 0.1 mgd. The expansion was approved by the DRBC pending PADEP's approval of a NPDES permit for a flow of 0.1 mgd, per Condition II.a. of the docket. The docket holder has constructed the upgrades approved by the previous docket (upgraded system was put into operation on July 17, 2007); however, the PADEP has yet to approve the expanded flow of the WWTP. This docket limits the approved discharge rate of the WWTP to 0.052 mgd.

The docket holder does not have approval from the PADEP (Act 537 Plan approval, Water Quality Management Permit approval, or NPDES Permit approval) for a discharge rate above 0.052 mgd. The docketed effluent limits in Effluent Table A-1 are based on an annual average flow rate of 0.052 mgd. PADEP issued preliminary effluent limits in a letter dated April 2, 2007 for the expanded flow of 0.1 mgd, which were included in the previous DRBC docket (D-2006-023 CP-2). The preliminary average monthly effluent limits listed in the April 2nd PADEP letter and DRBC Docket No. D-2006-023 CP-2 for the expanded flow of 0.1 mgd, are as follows:

EFFLUENT TABLE B-1: Future effluent limitations, based on a flow of 0.1 mgd

PARAMETER	LIMIT
pH (Standard Units)	6 to 9 at all times
Total Suspended Solids	16.8 mg/l
Dissolved Oxygen	5 mg/l
CBOD (5-Day at 20° C)	15.1 mg/l
Ammonia Nitrogen (5-1 to 10-31)	1.1 mg/l
(11-1 to 4-30)	3.2 mg/l
Nitrite-Nitrate	5.2 mg/l
Fecal Coliform (5-1 to 9-30)	200 / 100 ml as a geo. avg.
(10-1 to 4-30)	2000 / 100 ml as a geo. avg.
Phosphorus	0.35 mg/l

Future expected effluent limits for a flow up to 0.1 mgd are included in Effluent Table B-1 for informational purposes. The docket holder is required to submit an application to the

DRBC and gain approval for a docket modification for a permitted flow over 0.052 mgd upon receipt of approval by the PADEP for a discharge rate above 0.052 mgd, The docket holder us required to gain DRBC approval for a WWTP re-rate prior to discharging greater than 0.052 mgd (See DECISION Condition II.m.).

On September 26, 2007, the Commission approved DRBC Docket No. D-2006-023 CP-2 for the upgrade and expansion of the Coolbaugh Township WWTP. The docket holder did not submit an application for renewal prior to the docket expiring on September 26, 2012.

On July 16, 2008, the DRBC approved amendments to its *Water Quality Regulations (WQR)* that provide increased protection for waters that the Commission classifies as Special Protection Waters. The portion of the Delaware River and its tributaries within the boundary of the Lower Delaware River Management Plan Area was approved for Special Protection Waters designation. (Lower SPW)

Article 3.10.3A.2.e.1). and 2). of the *WQR*, states that projects subject to review under Section 3.8 of the Compact that are located in the drainage area of Special Protection Waters must submit for approval a Non-Point Source Pollution Control Plan that controls the new or increased non-point source loads generated within the portion of the applicant's service area which is also located within the drainage area of Special Protection Waters. The service area of the docket holder is located within in the drainage area to the Special Protection Waters. Since this project does not entail additional construction and expansion of facilities and/or service area (i.e., there are not any new or increased non-point source loads associated with this approval), the non-point source pollution control plan requirement is not applicable at this time. Accordingly, Special Condition II.o. has been included in the Decision section of this docket.

The Lehigh River Water Quality Model (LR-WQM) was developed in late 2009. The Coolbaugh Township WWTP was not included in the model; however, there is a potential that effluent discharge data from the WWTP will be used in the development of future versions of the model. TABLE B-1 contains the grandfathered loads that have been established for the WWTP.

Table B-1: Grandfathered Loads

	TSS (lbs/day)	Phosphorous (lbs/day)	Ammonia – N (lbs/day)	TN (lbs/day)	Nitrate as N (lbs/day)
May-Sept*	1.70	0.17	0.92	***	***
Oct-April**	1.48	0.18	2.83	***	***

* Loads are associated with an average flow of 0.045 gpd

** Loads are associated with an average flow of 0.052 gpd

*** Insufficient data exists to establish a load at this time, monitoring data will be used during the renewal of this docket to establish these loads

At the WWTP discharge location, Tobyhanna Creek has an estimated seven-day low flow with a recurrence interval of ten years of 3.36 mgd (5.2 cfs). The ratio of this low flow to the average design wastewater discharge from the expanded 0.1 mgd plant is 34 to 1.

The nearest surface water intake of record for public water supply downstream of the project discharge is operated by Hazelton City, which is located approximately 43 miles downstream from the docket holder's WWTP discharge.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

The limits in the NPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the Water Quality Regulations of the DRBC.

C. DECISION

I. Effective on the approval date for Docket No. D-2006-023 CP-3 below, Docket No. D-2006-023 CP-2 is terminated and replaced by Docket No. D-2006-023 CP-3.

II. The project and appurtenant facilities as described in the Section A "Physical Features" of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission's.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the *Water Quality Regulations* of the DRBC.

d. The docket holder shall comply with the requirements contained in the Effluent Tables in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results directly to the DRBC Project Review Section. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

e. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

f. If at any time the receiving treatment plant proves unable to produce an effluent that is consistent with the requirements of this docket approval, no further connections shall be permitted until the deficiency is remedied.

g. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

h. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F until stream temperatures reach 50°F, nor by more than 2°F when stream temperatures are between 50°F and 58°F, nor shall such discharge result in stream temperatures exceeding 58°F. (Trout Waters only)

i. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served section of this docket, which incorporates by reference sections B (Type of Discharge) and D (Service Area) of the docket holder's Application to the extent consistent with all other conditions of this DECISION section.

j. The docket holder shall make wastewater discharge in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

k. No sewer service connections shall be made to newly constructed premises with plumbing fixtures and fittings that do not comply with water conservation performance standards contained in Resolution No. 88-2 (Revision 2).

l. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

m. This docket approves a discharge rate from the project WWTP up to 0.052 mgd. Upon receiving PADEEP approval for a flow above 0.052 mgd, and prior to the WWTP discharging greater than 0.052 mgd, the docket holder shall submit an application to the Commission and be granted approval for the re-rate of the WWTP.

n. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

o. Prior to allowing connections from any new service areas or any new developments, the docket holder shall either submit and have approved by the Executive Director of the DRBC a Non-Point Source Pollution Control Plan (NPSPCP) in accordance with Section 3.10.3.A.2.e, or receive written confirmation from the Executive Director of the DRBC that the new service area is in compliance with a DRBC approved NPSPCP.

p. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket

renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

q. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive Director's judgment such modification or suspension is required to protect the water resources of the Basin.

r. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

s. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

t. Nothing in this docket constitutes a defense to any penalty action for past conduct of the docket holder or ongoing activity not authorized by this approval. In particular, renewal of this docket does not resolve violations – whether in the past or continuing – of provisions of the Delaware River Basin Compact (“Compact”) or any rule, regulation, order or approval duly issued by the Commission or the Executive Director pursuant to the Compact. The Commission reserves its right to take appropriate enforcement action against the docket holder, including but not limited to recovery of financial penalties consistent with Section 14.17 of the Compact, for any and all such prior or continuing violations.

u. The docket holder is prohibited from treating/pre-treating any hydraulic fracturing wastewater from sources in or out of the Basin at this time. Should the docket holder wish to treat/pre-treat hydraulic fracturing wastewater in the future, the docket holder will need to first apply to the Commission to renew this docket and be issued a revised docket allowing such treatment and an expanded service area. Failure to obtain this approval prior to treatment/pre-treatment will result in action by the Commission.

BY THE COMMISSION

DATE APPROVED:

EXPIRATION DATE: March 6, 2018

DRAFT